

This is a peer-reviewed, post-print (final draft post-refereeing) version of the following published document, Emerald Publishing © 2020 Creative Commons Attribution Non-commercial International License 4.0 (CC BY-NC 4.0) and is licensed under Creative Commons: Attribution-Noncommercial 4.0 license:

Al Bastaki, Suhail, Haak-Saheem, Washika and Darwish, Tamer K ORCID logoORCID: https://orcid.org/0000-0003-1815-9338 (2021) Perceived Training Opportunities and Knowledge Sharing: The case of the United Arab Emirates. International Journal of Manpower, 42 (1). pp. 113-130. doi:10.1108/IJM-10-2019-0457

Official URL: http://doi.org/10.1108/IJM-10-2019-0457 DOI: http://dx.doi.org/10.1108/IJM-10-2019-0457 EPrint URI: https://eprints.glos.ac.uk/id/eprint/8348

#### **Disclaimer**

The University of Gloucestershire has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

The University of Gloucestershire makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

The University of Gloucestershire makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

The University of Gloucestershire accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.

# Perceived Training Opportunities and Knowledge Sharing: The case of the United Arab Emirates

Al Bastaki, Suhail; Haak-Saheem, Washika; Darwish, Tamer K

#### **Abstract**

*Purpose:* We seek to examine the interplay between perceived training opportunities (PTOs) and knowledge sharing in the context of the emerging economic setting of the United Arab Emirates (UAE). We also examined the moderating role of intrinsic and extrinsic motivation and engagement in social interaction on the relationship between PTOs and knowledge sharing.

Design/methodology/approach: The study employed a survey method to collect the data and tested the proposed hypotheses by using the partial structural equation modelling (PLS-SEM) technique. Data is based on 815 responses across a range of sectors in the country context of the UAE.

Findings: Our findings indicate that PTOs are positively related to knowledge sharing. Notably, the results show that the proposed relationship between PTOs and knowledge sharing is negatively and significantly moderated by intrinsic motivation. Moreover, the moderating role of extrinsic motivation and engagement in social interaction were insignificant.

Originality/value: At a theoretical level, this article provides an individual level analysis, which indicates that PTOs pave the way for intraorganizational knowledge sharing; hence, they offer insights into the mechanisms in which PTOs impact on knowledge sharing. This article also contributes to our general understanding on human resource management (HRM) practices and knowledge sharing in the context of the emerging economy of the UAE; the latter has a number of implications for both, theory and practice as outlined in this study.

**Keywords** Perceived Training Opportunities; knowledge sharing; motivation; social interaction; emerging markets.

## Introduction

In the globalized economy, sustainable competitive advantage can only be gained if the firm's strategy and work processes are embedded within adequate knowledge management practices and learning solutions (Ardichvili and Yoon, 2009). Moreover, knowledge-based issues have become a central concern of many firms, and organizations often consider their ability to share and integrate knowledge to achieve a sustainable competitive advantage (Mäkelä and Brewster, 2009).

In this view, the capacity to manage knowledge determines the organizational competitiveness.

Given this fact, the management of knowledge has become a global concern.

Knowledge management has become an important area in organizational research and has received considerable attention form a number of management disciplines, such as organizational behaviour, international business or HRM or strategic management (Cohen and Levinthal, 1990; Grant, 1996; Minbaeva, Foss and Snell, 2009; Malik, Froese & Sharma, 2020). In line with the growing interest in knowledge and knowledge management, knowledge sharing has become a crucial determinant of a firm's success (Podrug, Filipović, & Kovač, 2017). Hence, studies show that intraorganizational knowledge sharing influences new product development and innovation positively (Tsai, 2001; Darwish, Zeng, Rezaei-Zadeh and Haak-Saheem, 2018).

Previous research argues that the provision of HRM practices and policies such as motivation (Gagné 2009), commitment (Cabrera, Collins and Salgado, 2006), training opportunities (Dysvik and Kuvaas 2008) and training intensity (Kuvaas, Buch and Dyvsik 2012; Buch, Dysvik, Kuvaas and Nerstad, 2015) are positively associated with employees' knowledge sharing. Therefore, HRM

practices play a pivotal role in supporting knowledge sharing (Mäkelä and Brewster, 2009). In this respect, Buch et al. (2015) appreciate the growing number of scholarly contributions on knowledge sharing and HRM practices.

Given the case of employee training, the positive effect of systematic approach towards employees' learning and development on organizational performance, is widely recognized (Dysvik and Kuvaas, 2008; Minbaeva, 2013; Buch et al., 2015). The role of training has been well documented in the literature on HRM and organizational performance (Darwish, Singh, and Wood, 2015). Though knowledge sharing can be positively influenced by providing training opportunities (Cabrera and Cabrera, 2005; Cabrera, Collins and Salgado, 2006), a number of questions concerning the nature of HRM's influence remain unanswered (e.g. Guest, 2011; Darwish et al. 2016). Despite calls for employee oriented HRM research, including perceptions of employees of HRM practices (e.g. Bowen & Ostroff, 2004), research in this area remains insufficient (Cooke, Dieckmann & Parry, 2020). Based on the idea of signalling theory (Bergh, Connelly, Ketchen, & Shannon, 2014), employees are seen as perceiving HR practices as signals of the organization (Bowen & Ostroff, 2004). For example, managers signal which behaviours are rewarded and valued, and employees interpret the signal and behave accordingly. Hence, we argue if employees perceive training opportunities valuable, they will feel obliged to reciprocate with knowledge sharing. Further, we explore the role of three moderators, such as intrinsic and extrinsic motivation and engagement in social exchange on the relationship between PTOs and knowledge sharing. Based on these individual practices, we investigate to what extent perceptions of training opportunities enhance knowledge sharing.

Further, in this study we seek to focus on the enduring influence of different historical, institutional and cultural factors in the UAE to enhance our understanding on how training opportunities are

perceived by employees, and what effects they may have on knowledge sharing. From this perspective, we aim to respond to the criticism on de-contextualized HRM research (see e.g. (Haak-Saheem, Darwish and Al Nasser, 2016) and deliver insights from a growing emerging market. Moreover, research on knowledge management and HRM is in its infancy stage in the context of non-Western countries (Haak-Saheem and Darwish 2014). Existing literature provides limited understanding to scholars and practitioners operating in the emerging economies, as most of the studies are embedded in the North American or European contexts (Wright, Filatotchev, Hoskisson and Peng, 2005). In case of knowledge sharing, Amin and Cohendet (2004) argue that situation and particular institutional setting is critical to understand knowledge sharing behaviour. Accordingly, the contextualized perspective pays more attention into the macro-environmental factors (Gergen, 1982). That is, we understand what is going on in regard of PTOs and knowledge sharing by appreciating where and when it is happening (Whetten, 1989). Therefore, the insights from this study is predominantly contextual, given the recent interest in building contextualized perspectives in the related field of HRM and knowledge sharing (Darwish et al. 2018). Consequently, additional insights can be gained from the interplay between PTOs and knowledge sharing, including the moderating roles of intrinsic and extrinsic motivation

Sudden wealth generated by post-1998 oil boom in Gulf countries (Bahrain, Kuwait, Oman, Qatar and Saudi Arabia, and UAE) provided unique opportunities to these states to develop their

and engagement in social interaction.

economies faster than any other country in the Middle East (Ewers, 2013). Thus, these countries have invested successfully in the acquisition of state-of-the-art business models, industrial knowledge and technological capabilities. In the case of the UAE, despite being one of the wealthiest countries in the world, the country faces unique barriers to economic transition. The government initiated several programs to reduce the reliance on foreign expertise (Haak-Saheem et al., 2016). Concerning this heavy dependency on international expertise, the government of the UAE has outlined the importance of KM and national human capital development in its strategic plan for the country (UAE Vision, 2021).

Overall, the research conducted in emerging markets in general – and that of the Middle East in particular – is not equivalent to the extensive body of research related to the Western world. Thus, only a limited number of studies provided insights into knowledge sharing in the emerging economies of the Gulf (e.g., Haak-Saheem and Darwish, 2014). Thus, practitioners and organizational scholars in the UAE and comparable institutional settings must recognize the urgency to modify their conceptual models, expectations and practices to understand how knowledge is developed and shared in an increasingly dynamic context (Felin, Zenger and Tomsik, 2009). Hence, we aim to contribute to the existing literature on HRM and knowledge sharing by delivering insights into a so-far-neglected emerging market setting.

This paper follows the subsequent structure; following the introduction the next section discusses the existing literature on PTOs and knowledge sharing and whether the relationship between PTOs and knowledge sharing is influenced by moderating roles of intrinsic and extrinsic motivation and the engagement in social interaction. The third section presents the research methods and

findings, whilst the last section discusses the findings and represents their implications for theory and practice.

# Theoretical background and hypotheses development

Knowledge sharing offers new opportunities to organizational members to overcome silo effects and, in turn, positively influence individual, group and organizational performance (Buch et al. 2015). The casual link between HRM and knowledge management has been stressed by the literature on strategic human resource management (Wright et al. 2013). In this context, knowledge sharing is an important element of knowledge-driven global competition (Argote and Ingram, 2000). Although research has demonstrated a link between HRM and knowledge sharing, the underpinning processes are not understood completely (Felin and Hesterly, 2007; Minbaeva et al., 2009); knowledge sharing poses challenges on organizations to develop adequate HRM practices to overcome barriers such as opportunistic behaviour (Cabrera et al., 2006). It has been highlighted training opportunities increase knowledge sharing and cooperation (Cabrera and Cabrera, 2006). In this respect, the availability of training opportunities supports employees' learning and development, which may increase the possibility to share knowledge with their colleagues (Colquitt, LePine and Noe, 2000).

Contrary to perceived training intensity (Kuvaas et al., 2012; Buch et al. 2015), PTOs involve the perception of different training opportunities for continuous learning and development (Dysvik and Kuvaas, 2008).

# Perceived training opportunities and knowledge sharing

In general, PTOs are defined as employees' perceptions of their participation in existing training opportunities (Dysvik and Kuvaas, 2008). Thus, some scholars argue that the link between PTOs and behavioural outcomes, such as knowledge sharing is influenced by external factors such as context, motivation, commitment or trust (Colquitt et al., 2000; Guest, 2011).

Furthermore, it has been outlined that the influence of training depends on employees' perceptions of these activities (Colquitt et al., 2000). Given the case, provided opportunities are experienced as relevant, employees seem to be motivated to participant (Colquitt et al., 2000). Moreover, employees feel valued and appreciated if training opportunities support individual growth and career advancement. This perception increases knowledge sharing and cooperation (Cabrera and Cabrera, 2005).

Participating in different training opportunities also helps to encourage employees to interact frequently and create a shared language (Kuvaas et al., 2012). Regular social interaction leads to the development of common values, norms and schemata (Cabrera et al., 2005). Hence, training opportunities instil an organizational culture characterized by continuous learning and ultimately knowledge sharing (Kuvaas et al., 2012). Thus, Dysvik and Kuvaas (2008) argue that training opportunities, perceived by employees as valuable enhances individual performance and organizational citizenship behaviour. In contrast, if adequate training opportunities are not provided, organizations face challenges to retain their employees (Darwish et al. 2016). From the HRM best practice view, the availability of training opportunities leads to improved performance at the individual, group and organizational level (Guest, 2011). The best practice model suggests,

therefore, that firms are better off if they incorporate the principles of the best practices approach (Khijli and Wang, 2006). In light of the theoretical discussion, we hypothesize that:

Hypothesis 1: There will be a positive direct relationship between PTOs and knowledge sharing.

# The moderating role of intrinsic motivation

Previous literature on knowledge management recognizes the relevance to disseminate knowledge within the organization (Szulanski, 2002; Minbaeva, 2013). As Argote and Ingram (2000) suggest, motivation is critical to encourage employees to share knowledge. According to the literature on knowledge sharing, intrinsically motivated employees are genuinely interested in their work and engage therefore more often in knowledge sharing (Gagné and Deci, 2005). It has been empirically shown that positive work behaviours an outcome of intrinsically motivated employees (see e.g. Deci and Ryan, 2000). Intrinsic motivation has been regarded as an important factor influencing individuals to engage in behaviours which result in pleasure and satisfaction (Gagné, 2009). Moreover, intrinsically motivated employees share knowledge predominately because they are more responsible, experience more meaning and enjoyment, and therefore for example, engage more often in discussing their work with their colleagues. In contrast, employees low in intrinsic motivation probably need to be "pushed" by, for example, training opportunities. Given the case, Gagné's (2009) proposal is generalisable, knowledge sharing is primarily determined by intrinsic motivation rather factors in the external environment. On the same baseline, existing research shows that intrinsic motivation leads to greater involvement and higher level of employee commitment (Gagné and Deci, 2005). As outlined in the literature, passionate

interest and a high level of satisfaction supports the process of knowledge sharing in organization (Amabile et al. 1994). With reference to existing research, we hypothesize the following:

Hypothesis 2: The relationship between PTOs and knowledge sharing will be moderated by intrinsic motivation – the lower the intrinsic motivation, the more positive the relationship.

## The moderating role of extrinsic motivation

Existing literature has shown that work behaviour is often influenced by perceived rewards (see Cabrera et al. 2006). From this perspective, Maurer and Tarulli (1994) argue that extrinsic motivation influences the participation in positive work behaviour such as knowledge sharing. Hence, knowledge sharing has been encouraged by extrinsic benefits such as financial incentives, promotions or developmental opportunities have been shown to be helpful in the context of knowledge sharing (Bock, Zmud, Kim and Lee, 2005). Further, the literature on extrinsic motivation includes intangible incentives as feedback or recognition (see Cabrera and Cabrera, 2005). However, extrinsic motivation has been viewed as impersonal because does not involve the direct or personal involvement of the employer (Shore et al. 2009). Hence:

Hypothesis 3: The relationship between PTOs and knowledge sharing will be moderated by extrinsic motivation – the higher the extrinsic motivation, the more positive the relationship.

# The moderating role of social interaction

It has been shown that engagement in social interaction (Blau, 1964) is related to knowledge sharing (Kuvaas et al., 2012; Minbaeva, 2012). More specifically, engagement in social interaction provides opportunities to organizations to integrate and combine existing knowledge and create new knowledge (Burt, 2005; Tortoriello, 2015). Uzzi (1997) outlines the relevance of interpersonal interaction in the context of building trust and sharing knowledge. Engagement in social interaction is even more salient in cases in which knowledge is rather nuanced, implicit and difficult to communicate (Granovetter, 2005). Thus, individuals rely on personal contacts and networks to engage in knowledge sharing. Scholarly discussions highlight the importance of creating an organizational culture which encourages frequent social interaction rather than investing in state-of-the-art technologies (see Kaše, Paauwe and Zupan, 2009; Tortoriello, 2015). Overall, intraorganizational networks have a positive impact on knowledge sharing as they are based on trust and cooperation.

In this view, research supports the notion that social interaction is helpful for sharing knowledge: the more often employees interact with each other the more positive it impacts knowledge sharing (Youndt and Snell, 2004). With reference to the arguments above, we hypothesize the following:

Hypothesis 4: The relationship between PTOs and knowledge sharing will be moderated by engagement in social interaction – the stronger the engagement in social interaction, the more positive the relationship.

## Contextual Setting

The UAE is one of the six countries of the Gulf Cooperation Council (GCC): Saudi Arabia, Oman, Kuwait, Bahrain, Qatar, and the UAE. The importance of the GCC arose as a result of the vast oil and gas deposits in these countries, which enabled rapid economic and social development (Kapiszewski, 2001; Akoum, 2008). With the rapid economic and social development across the GCC region, the governments realized the need to provide training opportunities to nationals to ensure further economic and social growth. In the case of the UAE, the government aims to transform the economy into a model which is driven by knowledge and innovation (UAE Vision 2021). Productivity and competitiveness in the global market is supported through various knowledge focused initiatives of the government. As a result of these investments in science, technology, and research and development, the UAE aims to become a major player regionally and globally. However, the shift to a knowledge-based economy can only be accomplished by the joint effort of multiple stakeholders. Given the importance of PTOs and knowledge sharing, the UAE government's initiatives intend to encourage public and private firms to encourage and nurture knowledge sharing. Since oil and gas reserves will not last forever, the country has introduced a number of polices and recommendations to ensure the future prosperity of the country. For example, government agencies moved to smart government practices which is completely paperless and supported by advanced technologies.

This strategic outlook is important to develop sustainable economic structures. The overall strategy of the government is to work towards a knowledge-based economy (UAE Vision, 2021). More specifically, the government emphasizes greater understanding and development of

intellectual and human capital. As stated in UAE Vision 2021, "A diversified and flexible knowledge-based economy will be powered by skilled Emiratis and strengthened by world-class talent to ensure long-term prosperity for the UAE" (UAE Vision, 2021). In this respect, there is fundamental interest in building intellectual and human capital (Ewers, 2013) by providing training opportunities to encourage knowledge sharing. Despite the existence of studies on motivation and knowledge sharing (Gagné, 2009), there is relatively little research in the wider Middle East region on the role of intrinsic motivation on the relationship between PTO and knowledge sharing. Hence, it is not yet possible to chart an effective awareness of intrinsic motivation and knowledge sharing in this part of the world. Furthermore, the attractive tax-free remuneration packages in UAE attracts a wide breath of individuals from the global labour market (Haak-Saheem and Brewster,

2017). The public sector has been proven to be a generous employer of the nationals, whilst the semi-government and private sector attracts a high number of expatriates. Monetary benefits are of interest of highly skilled expatriates. The lavish reward systems of organizations located in the UAE result in an appealing working environment; nationals and expatriates appreciate the compensation packages offered. Though engagement in social interactions has been studied fairly well (Blau, 1964; Kuvaas et al., 2012; Minbaeva, 2012), its effect on knowledge sharing has not been adequately explored.

# Methodology

Data was collected from a range of sectors based in the UAE, as shown in Table 1. We took over 15 months to complete the data collection stage; we decided to select a random sample across a

range of the services sectors in the country (education, banking, health sector, hospitality, consultancies, and government entities). Although the impact of training on knowledge sharing could be relevant to any sector, but we thought such sectors would be the most relevant ones given the importance of training and knowledge sharing issues for their operations. Following the work of Krejcie and Morgan (1970), the ideal representative sample size for our population would be 384. However, we have decided to go beyond that to get better insights and sectors distribution from the data. Hence, a sample of 1000 questionnaires was distributed from which we obtained 815 replies. The characteristics of the sampled organisations are recorded in Table 1. The majority of these participants are males (61%) and non-Emirati (75%). About 44% of the respondents work in the education, banking, health, hospitality and consultancy sectors. The remaining respondents are employed by diverse government entities.

Table 1: Demographic characteristics

Variable	Category	N	%
Gender	Male	493	60.5
	Female	322	39.5
Age	20–35	595	73.5
	36–50	186	23.0
	51+	29	3.6
Nationality	UAE	206	25.3
	Others	609	74.7
Educational Level	HS Diploma	137	16.8

	College Diploma	133	16.4
	Bachelor Degree	421	51.6
	Master Degree	116	14.2
	PhD	8	1.0
Sectors	Education	71	8.7
	Banking	161	19.8
	Health care	47	5.8
	Hospitality	44	5.4
	Consultancy	49	6.0
	Government entities	443	54.3

## Measures

The aim of this section is to present the measures of the constructs and assess their reliability and validity. Overall, the utilized measures are based on the work of Blau (1964), Deci (1976), Vroom (1964), Bresman, Birkinshaw and Nobel (1999), Osterloh, Frost and Frey (2002), Björkman, Barner-Rasmussen and Li (2004), Cabrera et al., (2006), Gagné (2009) and Wood, Dibben, Stride and Webster (2011).

# Perceived training opportunities

The scale used to measure PTOs was based on the work of Wood et al. (2011) and Dysvik and Kuvaas (2008) addressing the evaluation of PTOs (e.g. formal certified or sponsored courses with outside training bodies). Further, the measures reflect the perception of the respondents on the

relevance and use of available training opportunities. Specifically, we asked the respondents to indicate their views on a five-point Likert-scale items (ranging from 1 "To little or no extent" to 5 "To a very large extent"): "(1) is cross-training for multiple jobs/multi-skilling practised in your organization, (2) do you make use of informal workplace-based training, (3) is formal workplacebased training (uncertified) available to you, (4) is any other systematic training available, (5) are sponsored courses with outside training bodies available, (6) is informal workplace-based training available to you?".

# **Knowledge Sharing**

In relation to our outcome variable, the individual-level approach was adapted (see e.g. Minbaeva, Mäkelä and Rabbiosi, 2012); this characterization is suggested in the firm-level literature, in which effective knowledge sharing can be seen as the extent to which possible valuable knowledge is acquired from a sender and used by a receiver (Björkman et al., 2004; Bresman, Birkinshaw and Nobel, 1999).

Accordingly, we utilised four items to measure knowledge sharing across employee groups. Specifically, we asked the respondents to indicate their views on a five-point Likert-scale items (ranging from 1 "To little or no extent" to 5 "To a very large extent"): 1) have you gained knowledge from colleagues in other departments, (2) have you used knowledge from colleagues in other departments gained knowledge from you, (4) have colleagues in other departments used knowledge obtained from you?".

## Intrinsic motivation

As recommended by Vroom (1964), the paper operationalises motivation as "governing choices made by a person". Within this view, intrinsic motivation can be reflected by the commitment to a task for its own sake, whilst the reward being the satisfaction resulting from the activity (see Deci, 1976; Osterloh and Frey, 2002; Minbaeva et al., 2012). Consequently, the measure consists of times addressing intrinsic motivation by utilising three items on a five-point Likert-scale (ranging from 1 "Strongly disagree" to 5 "Strongly agree"): as follows "(1) increased value to me is enough to motivate knowledge sharing, (2) increased value to my department is enough to motivate knowledge sharing. (3) increased value to my company is enough to motivate knowledge sharing.

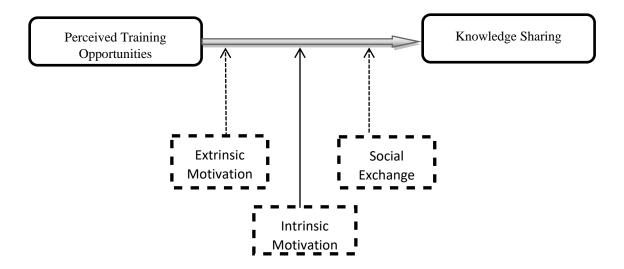
## Extrinsic motivation

As Cabrera et al., (2006, 251) outline, "when individuals perceive a link between knowledge sharing behaviours ... and organizational rewards ... they will be more inclined to participate in knowledge sharing activities" — the paper looks at the individual-level responsiveness to incentives to measure extrinsic motivation (see Minbaeva et al., 2012). To explore this assumption, respondents were asked whether they desire to be rewarded in the future for sharing and reusing knowledge in their company: "(1) by increments/bonuses, or (2) by promotion". The latter was measured by a five-point Likert scale ranging from 1 "To little or no extent" to 5 "To a very large extent".

## Social interaction

Social interaction consists of the following six items (see Minbaeva et al., 2012): To what extent do you (1) use meetings when you transfer knowledge to other people in your company, (2) use conferences, seminars, and workshops when you transfer knowledge to other people in your company, (3) use cross-functional project groups when you transfer knowledge to other people in your company, (4) use meetings when you search for knowledge, (5) use conferences, seminars, and workshops when you search for knowledge, (6) use cross-functional project groups when you search for knowledge? The latter was measured by a five-point Likert scale ranging from 1 "Never" to 5 "Very often". Figure 1 reflects the proposed conceptual model.

Figure 1: Conceptual model



# Data analysis and results

The study employed a survey method to collect the data and tested the proposed hypotheses by using the partial structural equation modelling technique. We decided to employ Smart PLS as it allows HRM researchers to estimate and assess relative complex models, while imposing relatively few restrictions in terms of data (Gefen, Rigdon, & Straub, 2011). Further, Smart PLS is a component based analytical tool; hence, when comparing it to other statistical modelling techniques (e.g., covariance-based SEM), it would require less stringent assumptions in relation to the levels of measurement of the manifest variables, multivariate normality and sample size (see Hulland, 1999). Another advantage of Smart PLS lies in the fact that the software also allows for the simultaneous testing of the proposed hypotheses (Ringle, Sarstedt, Mitchell, & Gudergan, 2018).

For testing the structural equation modelling, we adopt the two-stage approach recommended by Hulland (1999). The latter approach is useful given that it evaluates the measurement model first, and then the structural models will be evaluated in the second stage. Thus, the first stage assesses the reliability and validity of the research constructs, whilst the second stage demonstrates the statistical support in relation to the proposed hypotheses.

Table 2 presents the means, standard deviations, and zero-order correlations of all variables under consideration. It is instructive to note at the very outset that PTOs are positively related to knowledge sharing. In addition, it is interesting to see that all the moderating variables are positively related, and they positively and significantly related with the outcome variable. Some

of these results are encouraging and would provide some potential support for the proposed hypotheses.

Table 2: Descriptive statistics and correlation coefficients

	Descriptive Statistics		Pearson's Correlation Coefficient				
	Mean	SD	Knowledge Sharing	Training Opportunity	Social Exchange	Intrinsic Motivation	Extrinsic Motivation
1. Knowledge Sharing	3.31	0.78	1.00				
2. Training Opportunity	3.23	0.86	0.398	1.00			
3. Social Exchange	3.32	0.87	0.483	0.531	1.00		
4. Intrinsic Motivation	3.54	0.81	0.458	0.483	0.554	1.00	
5. Extrinsic Motivation	3.57	0.96	0.385	0.555	0.476	0.532	1.00

We first assess the reliability and construct validity (both convergent and discriminant validity) to address the adequacy of the measurement model (Hulland, 1999). As recorded in Table 3, the loadings of the items are statistically significant and greater than the .5 threshold (Hair, Black, Babin and Anderson, 2009; Kock, 2015); it is also noted that the values of average variance extracted (AVE) is greater than the .5 cut-off for each construct (Fornell and Larcker 1981); the results also show that the values of composite reliability and Cronbach's alpha are greater than the suggested .7 cut-off (Fornell and Larcker, 1981). Taken altogether, these results indicate that the measures have established acceptable levels of convergent validity. In addition, we calculated the square roots of the AVE to assess discriminant validity for all constructs (for more details see Table 3). The results demonstrate that the square roots of the AVE are larger than the constructs'

correlations (off-diagonal elements), suggesting that the constructs have also established acceptable levels of discriminant validity, following the criterion suggested by Fornell and Larcker, (1981).

Table 3: Item loadings, average variance extracted and composite reliability of the Constructs

	Standardized item loading	AVE	CR	CA
Knowledge Sharing		554	.832	.836
Q1	0.76**			
Q2	0.74**			
Q3	0.76**			
Q4	0.72**			
Training Opportunity		.546	.878	.879
Q21	0.64**			
Q22	0.76**			
Q23	0.79**			
Q24	0.76*			
Q25	0.74**			
Q26	0.73**			
Intrinsic Motivation		.666	.856	.862
Q11	0.79**			
Q12	0.89**			
Q13	0.76**			
Extrinsic Motivation		.695	.873	.877

Q18	0.82**			
Q19	0.86**			
Q20	0.82**			
Social Exchange		.545	.827	.833
Q6	0.70**			
Q7	0.75**			
Q9	0.74**			
Q10	0.79**			

<sup>\*\*</sup> p < .001; AVE = average variance extracted, CR = composite reliability; CA = Cronbach's alpha

Table 4: Square roots of AVE and correlation coefficients

	1	2	3	4	5
Knowledge Sharing	(0.744)	0.398	0.483	0.458	0.385
2. Training Opportunity	0.398	(0.739)	0.531	0.483	0.555
3. Social Exchange	0.483	0.531	(0.739)	0.554	0.476
4. Intrinsic Motivation	0.458	0.483	0.554	(0.816)	0.532
5. Extrinsic Motivation	0.385	0.555	0.476	0.532	(0.834)

Note: Diagonal elements are the square root of AVE of constructs, while the off-diagonal elements are the correlation between constructs. For discriminant validity, the diagonal elements should be larger than the off-diagonal elements.

From the above results in relation to the reliability, convergent and discriminant validity, it can be concluded that the construct measurements are adequately solid to enable subsequent structural

model estimation. Further, the results in relation to the SEM goodness of fit (GoF) and quality indices demonstrate robust statistical evidence that the SEM estimates are adequate. Following the criteria discussed in the work of Kock (2015), the following GoF and quality indices of the model are within the acceptable range: Average path coefficient (APC)=.133 (p<.001), Average Rsquared (ARS)=.167 (p<.001), Average adjusted R-squared (AARS)=.163 (p<.001), Average block VIF (AVIF)=1.442 (acceptable if <=5, ideally <=3.3), Average full collinearity VIF (AFVIF)=1.649 (acceptable if <=5, ideally <=3.3) and Tenenhaus GoF (GoF)=.305.

As the results of the structural equation model show, a positive and significant relationship between PTOs and knowledge sharing is evident ( $\beta$ =.40, p<.001). In this finding, the more extensive the PTOs, the greater the occurrence of knowledge sharing; thereby, H1 is supported. Figure 2 summarises the results of PLS-SEM. In the case of intrinsic motivation, it is shown that latter has negatively and significantly moderated the relationship between PTOs and knowledge sharing ( $\beta$ =-.07, p<.05). This finding indicates that the lower the intrinsic motivation, the stronger the relationship between training opportunity and knowledge sharing. This finding is depicted in Figure 2a. Overall, H1 and H2 are supported.

Figure 2: The moderation model with the path coefficients

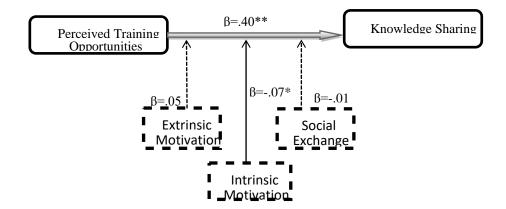
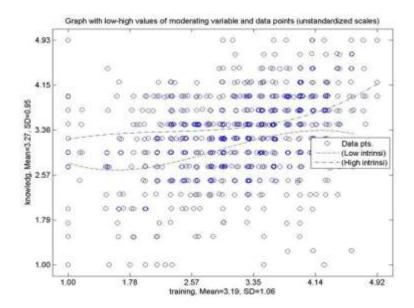


Figure 2a: Relationship between training opportunity and knowledge sharing as moderated by intrinsic motivation



Mixed results were obtained for the moderation role of extrinsic motivation and engagement in social interaction. As the results show, PTOs and knowledge sharing relationship was insignificantly moderated by extrinsic motivation ( $\beta$ =.05, p>.05) and social interaction ( $\beta$ =.01, p>.05). These findings indicate that neither H3 nor H4 is supported. Figures 2b and 2c display the moderation role of extrinsic moderation and engagement in social interaction.

Figure 2b: Relationship between training opportunity and knowledge sharing as moderated by extrinsic motivation

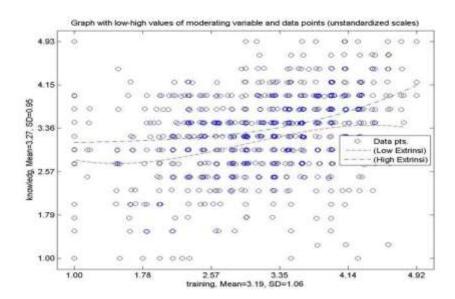
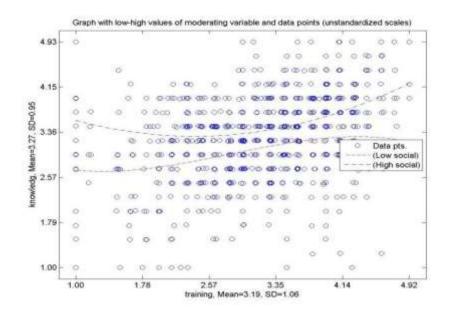


Figure 2c: Relationship between training opportunity and knowledge sharing as moderated by social exchange



#### **Discussion and Conclusions**

As hypothesized, the results indicate that PTOs are positively related to knowledge sharing in the context of the UAE. The findings contribute to the existing literature by demonstrating that employees' perception of diverse training opportunities can upsurge knowledge sharing behaviour. One interpretation of this key finding rests on the assumption that employees feel more valued and invested in if they perceive training opportunities. Further, PTOs help employees to gain new skills and abilities and enhance their personal value to their institutions. This assumption positively affects their perception on job security and therefore encourages employees to share knowledge. Relating to job security, PTOs serve as an important purpose within the context of the UAE. As aforementioned, the employment market in the UAE exhibits particular features such as the dominant presence of expatriates. More specifically, the country faces enormous challenges when it comes to people management issues as the ratio of 'nationals' to 'expatriates' is considered to be one of the most disproportionate in the world (see, for example, Hvidt, 2009; Forstenlechner and Mellahi, 2011). The latter is further supported by the fact that less than 20% of the country's total population are locals (Hvidt, 2009). The reliance on foreign knowledge and skills has started to appear as a nationwide challenge (Al-Wagfi and Forstenlechner, 2014). Moreover, despite the rapid economic growth, unemployment of nationals is deemed to be challenge across the UAE. Therefore, since the late 1980s, the government has introduced Emiratization as a federal policy to enforce the employment of nationals. This approach aims to reduce the dependency on expatriates and create employment opportunities for local citizens in the public and private sectors. Notably, whether in public or private sectors, the government expects institutions to employ a minimum percentage of nationals. For instance, the workforce in banks should consist of at least 67% nationals. However, in light of the growing number of nationals and the advancement in the local education system, Emiratization evokes fear and insecurity among expatriates. More specifically, Emiratization is often viewed as a threat to the careers of skilled expatriates and therefore they often withhold their knowledge in order to secure their employment (Sidani and Al, Ariss 2014). In this view, the provision of training provides new prospects to gain skills and reduces fear of being replaced by nationals. Furthermore, PTOs could be seen as an advancement of an employee's own career and their attractiveness in the employment market.

In addition, we found evidence for the moderating role of intrinsic moderation (also see similar results by Kuvaas et al., 2012). Despite the different institutional setting of the UAE, employees who are intrinsically motivated are driven by passion and interest in their work and therefore they enjoy and engage in knowledge sharing. Consequently, intrinsic motivations has rather a universal effect across national boundaries.

However, in contradiction with exiting literature (see, for example, Gagné 2009; Kuvaas et al., 2012, Minbaeva 2013), indicating that extrinsic motivation would positively be related to knowledge sharing behaviour, we found no evidence of the latter; the current results indicate that the relationship between PTOs and knowledge sharing behaviour was insignificantly moderated by extrinsic motivation. Whilst the latter could simply be explained in light of the unique institutional setting under investigation, or the specific mechanisms of extrinsic motivations adopted by organisations in the UAE, rational explanations for such results do also exist, where scholars ague that task-contingent incentives and rewards may have a negative effect on extrinsic

motivations (for more details, see Eisenberger and Cameron, 1996). However, this finding can be seen in light of the diverse workforce: it can be argued that organizations find it difficult to identify effective extrinsic motivation mechanisms due to the varying needs of the diverse workforce. For instance, the needs of skilled Western expatriates may differ from the needs of expatriates coming from less developed Asian countries.

Further, in contrast to previous findings (see Kuvaas et al., 2012; Minbaeva et al., 2012), social interaction has no moderating role on the relationship between PTOs and knowledge sharing behaviour. Again, whilst this result may be owned in the research design and the sample, there is a set of rational explanations for this observation: the highly segmented workforce may rather hinder engagement in social engagement across nationalities and cultural boundaries. More specifically, as Festinger (1950) outlines, beliefs and opinions of individuals, when they are shared by others who are adequately comparable or similar to oneself, are experienced as valid. Accordingly, employees in UAE interact with individuals similar to them. Engagement in social interactions across cultural cluster is less likely to happen. However, knowledge sharing within homogenous groups is less valuable than when it is between individuals whose social networks and connections span social group boundaries (Granovetter, 1985). In addition, the prevailing fear to lose the job may reduce the value of engagement in social interaction. Furthermore, the nonsignificant moderating role of social interaction on the relationship between PTOs and knowledge sharing behaviour in the UAE context may reflect the lack of trust among employees of one another and of organizational systems and practices. The latter is particularly true in the UAE, where expatriates' expectations encompass short-term employment and low job security (Connell and Burgess 2013).

Another reason for the given finding may lie in what Grant (1996) describes as the importance of a shared language, as the latter can be seen as a driver of efficient and effective knowledge sharing behaviour. Although English is widely spoken and the most common business language in the UAE, Arabic remains the official one. Due to the highly diversified workforce in the country, quite a lot of nationalities and cultures do exist; hence, for the majority, English is still considered as second language in the country (see Haak-Saheem and Darwish 2014).

# Implications for theory and practice

Overall, this work is conducted in an emerging market setting, and is the first of its kind in the country of the UAE. From a theoretical viewpoint, our work adds to existing literature on training and knowledge sharing behaviour by providing an individual level analysis on this relationship; the latter is complementary to the focus of contemporary work carried out in emerging markets. The importance of the individual level analysis can be highlighted by the fact that PTOs paves the way for intraorganizational knowledge sharing. In short, our findings offer fresh insights into the mechanisms in which PTOs are related to knowledge sharing behaviour. Hence, we argue that the strength of training opportunities is positively and significantly related to knowledge sharing behaviour. If training opportunities are incapable to cultivate knowledge sharing behaviour in the context of the UAE, this will questionably raise some doubts on the wider significance and relevance of HRM practices across similar contexts.

We also offer a number of recommendations to those in positions of leading the initiatives of knowledge management or else seeking to provoke knowledge sharing behaviour within their institutions. First, practitioners should put emphasis on efforts to promote the perception of

employees on the availability and accessibility of training opportunities. Specifically, employees must feel that training opportunities enhance their skills and abilities are available and experience them as such. Without a doubt, such perception have important implications for employees' knowledge sharing behaviour. Second, the study suggests that practitioners should not concern themselves with what may cause intrinsic motivation; rather, they should focus on the examination of the conditions that elicit and sustain this innate propensity. For instance, a vibrant social environment can be created by managers to further facilitate and forestall intrinsic motivation by meeting the people's psychological needs. In this context, tasks assigned according to the competencies of the individual can be of a great importance; employees should feel enjoyment, autonomy and satisfaction. Given the fact that HRM in the UAE is still emerging, our findings support the notion of developing training opportunities to foster knowledge sharing.

## Limitations and future work

Regardless of its contributions, there are a number of limitations associated with the current work.

First, a cross-sectional design was employed which rules out the possibility of reverse causality. A longitudinal data would be strongly recommended in future work. Moreover, whilst data was collected from organizations operating in the UAE, our results should be carefully interpreted; in other words, it should not understood to be applicable to distinctly different national systems and cultures. Further, a number of barriers to knowledge sharing behaviour could have been overlooked; this can be natural barriers such as time and space, and future work could attempt to control such factors to ensure more reliable findings.

In addition, the present study strongly encourages scholars to further explore the subject in different national systems and cultures. Future work could also further extend existing research frameworks to explore sharing behaviours within more specific categories of knowledge assets, and doing so outside the boundaries of business institutions (as knowledge can also be shared with suppliers, customers and shareholders). Finally, data obtained from peers or supervisors in relation to knowledge sharing can also be useful and would potentially add a theoretical value to the existing literature.

## References

- Al-Waqfi, M. A. and Forstenlechner, I. (2014). Barriers to Emiratization: The role of policy design and institutional environment in determining the effectiveness of Emiratization. *The International Journal of Human Resource Management* 25(2), 167–189.
- Amabile, T. M., Hill, K. G., Hennessey B. A. and Tighe, E. M. (1994). The Work Preference Inventory: Assessing intrinsic and extrinsic motivational orientations, 66(5), 950.
- Amin, A. and Cohendet, P. (2004). *Architectures of knowledge: Firms, capabilities, and communities*. Oxford University Press on Demand.
- Ardichvili, A. and Yoon, S. W. (2009). Designing integrative knowledge management systems: Theoretical considerations and practical implications. *Advances in Developing Human Resources* 11(3), 307–319.
- Argote, L. and Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes* 82(1), 150–169.
- Bergh, D. D., Connelly, B. L., Ketchen Jr, D. J., & Shannon, L. M. (2014). Signalling theory and equilibrium in strategic management research: An assessment and a research agenda. *Journal of Management Studies*, 51(8), 1334-1360.
- Björkman, I., Barner-Rasmussen, W., and Li, L. (2004). Managing knowledge transfer in MNCs: The impact of headquarters control mechanisms. Journal of international business studies, 35(5), 443-455.
- Blau, P. M. (1964) Exchange and power in social life. Wiley, New York, NY.
- Bock, G. W., Zmud, R.W. Kim, Y.G and Lee, J.N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly* 87–111.
- Bowen, D. E. and Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the "strength" of the HRM system. *Academy of Management Review* 29(2), 203–221.
- Bresman, H. Birkinshaw, J. and Nobel, R. (1999). Knowledge transfer in international acquisitions. Journal of International Business Studies 439–462.
- Buch, R. Dysvik, A., Kuvaas, B. and Nerstad, C. G. (2015). It takes three to tango: exploring the interplay among training intensity, job autonomy, and supervisor support in predicting knowledge sharing. *Human Resource Management* 54(4), 623–635.
- Burt, R. S. (2005). Brokerage and closure: An introduction to social capital. OUP Oxford.
- Cabrera, A. W., Collins, C. and Salgado J. F. (2006). Determinants of individual engagement in knowledge sharing. *The International Journal of Human Resource Management* 17(2), 245–26
- Cabrera, E. F. and Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *The International Journal of Human Resource Management* 16(5), 720–735.
- Cooke, F. L., Dickmann, M., & Parry, E. (2020). Important issues in human resource management: introduction to the 2020 review issue. doi.org/10.1080/09585192.2020.1691353
- Cohen, W. M. and Levinthal, D.A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly* 128–152.

- Colquitt, J. A., LePine, J.A. and Noe, R.A. (2000). Towards an integrative theory of training and motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology* 85(5), 678–707.
- Connell, J. and Burgess, J. (2013). Vulnerable workers in an emerging Middle Eastern economy: What are the implications for HRM? *The International Journal of Human Resource Management* 24(22), 4166–4184.
- Darwish, T., Singh, S. and Wood, G. (2016). The impact of human resource practices on actual and perceived organizational performance in a Middle-Eastern emerging market. *Human Resource Management*, 55(2), 261-281.
- Darwish, T., Zeng, J., Rezaei Zadeh, M. and Haak-saheem, H. (2018). Organizational learning of absorptive capacity and innovation: Does leadership matter? *European Management Review*, DOI: 10.1111/emre.12320.
- Deci, E. L. (1976). Notes on the theory and metatheory of intrinsic motivation. *Organizational Behavior and Human Performance* 15(1), 130–145.
- Deci, E. L. and Ryan, R.M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry* 11(4), 227–268.
- Dysvik, A. and Kuvaas, B. (2008). The relationship between perceived training opportunities, work motivation and employee outcomes. *International Journal of Training and Development* 12(3), 138–157.
- Eisenberger, K. and Cameron, J. (1996). Detrimental effects of reward: Reality or myth? *American Psychologist* 51(11), 1153.
- Ewers, M. C. (2013). From knowledge transfer to learning: The acquisition and assimilation of human capital in the United Arab Emirates and the other Gulf States. *Geoforum* 46, 124–137.
- Felin, T. and Hesterly, W.S. (2007). The knowledge-based view, nested heterogeneity, and new value creation: Philosophical considerations on the locus of knowledge. *Academy of Management Review* 32(1), 195–218.
- Felin, T. Zenger, T.R. and Tomsik, J. (2009). The knowledge economy: Emerging organizational forms, missing microfoundations, and key considerations for managing human capital. *Human Resource Management* 48(4), 555–570.
- Festinger, L. (1950). Informal social communication. *Psychological Review* 57(5), 271.
- Fornell, C. and Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18(1), 39–50.
- Forstenlechner, I. and Mellahi, K. (2011). Gaining legitimacy through hiring local workforce at a premium: the case of MNEs in the United Arab Emirates. *Journal of World Business* 46(4), 455–461.
- Gagné, M. (2009). A model of knowledge-sharing motivation. *Human Resource Management* 48(4), 571–589.
- Gagné, M. and Deci, E.L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior* 26(4), 331–362.
- Gefen, D., Rigdon, E. E., & Straub, D. (2011). Editor's comments: an update and extension to SEM guidelines for administrative and social science research. Mis Quarterly, iii-xiv.
- Gergen, K. J. (2012). Toward transformation in social knowledge. Springer Science & Business Media.

- Granovetter, M. (2005). The impact of social structure on economic outcomes. *Journal of Economic Perspectives* 33–50.
- Grant, R. M. (1996) Toward a knowledge-based theory of the firm. *Strategic Management Journal* 17(S2), 109–122.
- Guest, D. E. (2011). Human resource management and performance: Still searching for some answers. *Human Resource Management Journal* 21(1), 3–13.
- Haak-Saheem, W., & Brewster, C. (2017). 'Hidden' expatriates: International mobility in the United Arab Emirates as a challenge to current understanding of expatriation. *Human Resource Management Journal*, 27(3), 423-439.
- Haak-Saheem, W. Darwish, T.K. (2014). The role of knowledge management in creating a culture of learning: The case of Dubai Municipality. *Management Decision* 52(9), 1611–1629.
- Haak-Saheem, W., Darwish, T.K and Al-Nasser, A.D. (2016). HRM and knowledge transfer: A micro analysis in a Middle Eastern emerging market. *The International Journal of Human Resource Management*.
- Hair, J.F. Black, W.C., Babin, B.J. and Anderson, R.E. (2009). *Multivariate Data Analysis*. Prentice Hall, Upper Saddle River, NJ.
- Hulland, J. and Richard Ivey School of Business (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal* 20(2), 195–204.
- Hvidt, M. (2009). The Dubai model: An outline of the key development Process elements in Dubai. *International Journal of Middle East Studies* 41, 397–418.
- Kaše, R. Paauwe, J and Zupan, N. (2009) HR practices, interpersonal relations, and intrafirm knowledge transfer in knowledge intensive firms: A social network perspective. *Human Resource Management* 48(4), 615–639.
- Khilji, S. E. and Wang, X. (2006). 'Intended' and 'implemented' HRM: The missing linchpin in strategic human resource management research. *The International Journal of Human Resource Management* 17(7), 1171–1189.
- Kock, N. (2015). WarpPLS 5.0 User Manual. ScriptWarp Systems, Laredo, TX.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and psychological measurement, 30(3), 607-610.
- Kuvaas, B. Buch, R. and Dysvik, A. (2012). Perceived training intensity and knowledge sharing: Sharing for intrinsic and prosocial reasons. *Human Resource Management* 51(2), 167–187.
- Mäkelä, K. and Brewster, C. (2009). Interunit interaction context, interpersonal social capital and the differing levels of knowledge sharing. *Human Resource Management* 48(4), 591–613.
- Malik, A., Froese, F. J., & Sharma, P. (2020). Role of HRM in knowledge integration: Towards a conceptual framework. *Journal of Business Research*, 109, 524-535.
- Maurer, T.J. and Tarulli, B.A. (1994). Investigation of perceived environment, perceived outcome, and person variables in relationship to voluntary development activity by employees. *Journal of Applied Psychology* 79(1), 3.
- Minbaeva, D. B. (2013). Strategic HRM in building micro-foundations of organizational knowledge-based performance. *Human Resource Management Review* 23(4), 378–390.
- Minbaeva, D., Foss, N. and Snell, S. (2009). Bringing the knowledge perspective into HRM. *Human Resource Management* 48(4), 477–483.

- Minbaeva, D., Mäkelä, K. and Rabbiosi, L. (2012). Linking HRM and knowledge transfer via individual level mechanisms. *Human Resource Management* 51(3), 387–405.
- Osterloh, M. and Frey, B.S. (2000). Motivation, knowledge transfer, and organizational forms. *Organization Science* 11(5), 538–550.
- Pfeffer, J. and Sutton, R.I. (2006). Evidence-based management. *Harvard Business Review* 84(1), 62.
- Podrug, N., Filipović, D., & Kovač, M. (2017). Knowledge sharing and firm innovation capability in Croatian ICT companies. *International Journal of Manpower*, Vol. 38(4), 632-644.
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2018). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 1-27.
- Shore, L.M., Bommer, W.H., Rao, A.N. and Seo, J. (2009). Social and economic exchange in the employee—organization relationship: The moderating role of reciprocation wariness. *Journal of Managerial Psychology* 24(8), 701–721.
- Sidani, Y. and Al Ariss, A. (2014). Institutional and corporate drivers of global talent management: Evidence from the Arab Gulf region. *Journal of World Business* 49(2), 215–224.
- Szulanski, G. (2002). Sticky knowledge: Barriers to knowing in the firm. SAGE.
- Tortoriello, M. (2015). The social underpinnings of absorptive capacity: The moderating effects of structural holes on innovation generation based on external knowledge. *Strategic Management Journal* 36(4), 586–597.
- Tsai, W. (2001). Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal* 44(5), 996–1004.
- UAE Vision 2021, available at <a href="http://www.vision2021.ae/en">http://www.vision2021.ae/en</a> (accessed 5 March 2015).
- Uzzi, B. (1997) Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly* 35–67.
- Vroom, V. H. (1964). Work and motivation.
- Whetten, D. A. (1989). What constitutes a theoretical contribution?. Academy of management review, 14(4), 490-495.
- Wood G., Dibben, P., Stride, C. and Webster, E. (2011). HRM in Mozambique: Homogenization, path dependence or segmented business system? *Journal of World Business* 46(1), 31–41.
- Wright M., Filatotchev, I., Hoskisson, R.E. and Peng, M.W. (2005). Strategy research in emerging economies: Challenging the conventional wisdom. *Journal of Management Studies* 42(1), 1–33.
- Wright, P. M., Dunford, B. B., and Snell, S.A. (2001). Human resources and the resource based view of the firm. *Journal of Management* 27(6), 701–721.
- Youndt, M. A. and Snell, S.A. (2004). Human resource configurations, intellectual capital, and organizational performance. *Journal of Managerial Issues* 337–36.